## 26th IAA SYMPOSIUM ON SPACE AND SOCIETY (E5) Models for Successfully Applying Space Technology Beyond Its Original Intent (2)

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### PUBLIC PRIVATE PARTNERSHIPS: LESSONS FROM EUROPE AND AN ASSESSMENT OF APPLICABILITY IN AN EMERGING SPACE MARKET.

#### Abstract

Public Private Partnerships (PPP) have typically emerged in the space sector once a State has committed itself towards the development of a strong base for space activities and services. PPPs have hence emerged from developed space faring countries including the United States, Europe and Japan. The stakeholders within a PPP typically have their vested interest with the public partner, typically a Ministry/Agency representing the State encouraging PPP models for cost, schedule advantages and the private partner, typically an industry player or a conglomerate expecting to establish an intellectual and technological base in the process (alongside profits), with a foresight of leveraging the foundation towards global commercial exploitation. There have been several PPP models emerging out of for the space and launch segments of which some of have them have been profitable for both the public and the private partners, while some of the PPP flagship projects have resulted in cost and schedule misfortunes within the partnership. With the economic emergence of the developing world, the investments of States in outer space activities have also seen a surge. Several countries including India, Mexico, Brazil, South Africa, are committing towards increased budgets towards space missions and services. These present an excellent opportunity towards local industry to establish typically PPP-type models to work towards a national space vision. The present work provides an analysis of PPP models that have emerged from Europe with a stakeholder analysis based on their performance over the past three decades, also focusing on the importance of these partnerships during economic crisis (e.g. 2008-2009) where private investors became key-drivers where public EU finances were facing a difficult period. The political aspect and international laws are analyzed, in particular showing already existing European agreements (e.g. the Green Paper published by the European Commission) which are inputs for new developing countries. Given then change in the terrain of space activities, the analyses of PPPs conducted in the presented work are assessed for their applicability with plausible implications for emerging space faring economies. Key issues for sustainability of engagement in such partnerships are discussed in order to satisfy the interests of each party, which shall remain critical to decision makers to commit towards continuing and developing several services.